BLUEFIN TUNA ADDENDUM
to the
DRAFT Highly Migratory Species Fishery Management Plan

Chapter 8: OTHER APPLICABLE LAW

February 8, 1999

*The Addendum follows the same format and structure as the draft HMS FMP, but only includes sections of the draft FMP which have been modified in some way. Sections which are not changing at all have been indicated as such by **(STET)**, and are not included in the Addendum. The final HMS FMP will combine information from the Addendum and the draft HMS FMP.*

8.0 Other Applicable Laws

This draft fishery management plan and Addendum has been prepared primarily in response to new requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). It also addresses requirements of the Atlantic Tunas Convention Act, the Marine Mammal Protection Act, and the Endangered Species Act. However, these are not the only laws that NMFS must consider in developing an FMP. In preparing a fishery management plan, NMFS must comply with requirements of the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), the Administrative Procedures Act (APA), the Paperwork Reduction Act (PRA), and Executive Order 12866. These other applicable laws help ensure that, in developing an FMP, NMFS considers the full range of alternative actions and their expected impacts on the marine environment, living marine resources, and the human communities that could be affected. The integrated draft HMS FMP and Addendum documents contain all elements of the Fishery Management Plan, the Draft Supplemental Environmental Impact Statement (DEIS) (which is required by NEPA); the Initial Regulatory Flexibility Analysis (IRFA) (which is required by RFA); the Regulatory Impact Review (RIR) (which is required by E.O. 12866); and the Social Impact Assessment (SIA)/Fishery Impact Statement (FIS). This chapter addresses requirements of these other applicable laws. Some of the requirements of the other applicable laws are discussed in the body of the draft FMP and Addendum and are not repeated here. Chapter, section, and page references are provided. In other cases, the element required by law is not found elsewhere and is addressed fully in this chapter.

8.1 Draft Supplemental Environmental Impact Statement

The National Environmental Policy Act (NEPA) requires preparation of an Environmental Impact Statement (EIS) for major Federal actions that significantly affect the quality of the human environment. The 1985 Atlantic Swordfish FMP and the 1983 Atlantic Shark FMP each included a Final EIS. NMFS published a Notice of Intent to prepare this DSEIS in the Federal Register (62 FR 45614; August 28, 1997), followed by 21 public scoping meetings. NMFS prepared an issues and options paper, *Issues and Options for Management of Atlantic Tunas, Swordfish, and Sharks* for discussion at the scoping meetings, and invited public comment on other options that should be considered and/or issues that were of particular importance to the public. NMFS also held six meetings of its HMS Advisory Panel (AP) during preparation of the DEIS/draft FMP. All HMS AP meetings are open to the public. Meetings were held throughout the fishing region to give fishery participants an opportunity to attend meetings. The DEIS will be the subject of public hearings during early 1999. NMFS will take public comment into consideration when preparing the FEIS.

NMFS has also prepared an Addendum to the DEIS/draft HMS FMP which addressees BFT rebuilding, BFT domestic allocation, and measures to reduce dead discards of BFT, and proposed General category effort controls for the 1999 fishing season. Comments on the Addendum and specifications will be accepted during the public hearings scheduled for early 1999.

The table of contents for the DSEIS is provided to aid reviewers in referencing corresponding sections of the FMP. The sections with an "*" are sections which are updated in the Addendum and specifications, and readers should reference those documents for the latest information on BFT.

Environmental Consequences	
Analysis of Impacts	[See above under "Alternatives Including the Proposed Action." Analyses of impacts are presented in the same sections as are the alternatives]
Summary of Impacts*	2.2; 3.1
Effects of the Fishery on the Environment	8.2.3
Affected Environment	
Description of Stocks	
Atlantic Tunas*	2.1.1, 5.1
North Atlantic Swordfish	2.1.1, 5.4
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Description of Habitat	6.2
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8.1.1 Purpose and Need for Action

This draft FMP was prepared in response to new requirements of the Magnuson-Stevens Act, among them rebuilding overfished fisheries; minimizing bycatch and bycatch mortality, to the extent practicable; identifying and protecting essential fish habitat; and minimizing adverse impacts of fisheries regulations on fishing communities, to the extent practicable.

Problems for Resolution

The following problems that exist in the fisheries for Atlantic tunas, swordfish, and sharks have been identified in this FMP and are addressed in the DEIS and Addendum. These problems are listed in no particular order.

- Overfished populations of Atlantic HMS;
- Excess fishing mortality caused by bycatch and discards;
- Inconsistencies and inadequacies in international compliance with conservation and management measures;
- Assuring optimal data collection;
- Domestic HMS management needs to be integrated and streamlined; and
- Overcapitalization

Management Objectives

The proposed management objectives for the Atlantic HMS FMP are described below and serve as the foundation for many of the preferred alternatives. They are listed in no particular order.

- To prevent or end overfishing of Atlantic tunas, swordfish and sharks and adopt the precautionary approach to fishery management;
- To rebuild overfished fisheries in as short a time as possible and control all components of fishing mortality, both directed and incidental, so as to ensure the long-term sustainability of the stocks and promote stock recovery for the management unit to the level at which the maximum sustainable yield (MSY) can be supported on a continuing basis;
- To minimize, to the extent practicable, adverse impacts on fishing communities of the transition from overfished fisheries to healthy ones;
- To minimize, to the extent practicable, bycatch of living marine resources and the mortality of such bycatch that cannot be avoided in the fisheries for Atlantic tunas, swordfish, and sharks;
- To establish a foundation for international negotiation on conservation and management measures to rebuild overfished fisheries and to promote achievement of optimum yield (OY) for these species throughout their range, both within and beyond the exclusive economic zone (EEZ). Optimum yield is the maximum sustainable yield from the fishery, reduced by any relevant social, economic, or ecological factors.
- To provide a framework, consistent with other applicable law, to take necessary action under ICCAT compliance recommendations.
- To provide the data necessary for assessing the fish stocks and managing the fisheries, including addressing inadequacies in collection and ongoing collection of social, economic, and bycatch data about HMS fisheries.
- Consistent with other objectives of this FMP, to manage Atlantic HMS fisheries for the continuing optimum yield (OY) so as to provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems. Optimum yield is the maximum sustainable yield from the fishery, reduced by any relevant social, economic, or ecological factors.
- To better coordinate domestic conservation and management of the fisheries for Atlantic tunas, swordfish, sharks, and billfish, considering the multispecies nature of many HMS fisheries, overlapping regional and individual participation, international management concerns, and other relevant factors;
- To simplify and streamline HMS management while actively seeking input from affected constituencies, the general public, and the HMS Advisory Panel;
- To promote protection of areas identified as essential fish habitat for tunas, swordfish, and sharks;

- To reduce latent effort and overcapitalization in the Atlantic shark and swordfish commercial fisheries;
- To develop eligibility criteria for participation in the shark and swordfish fisheries based on historical participation, including access for traditional swordfish handgear fishers to participate fully as the stock recovers; and
- To create a management system to make fleet capacity commensurate with resource status so as to achieve the dual goals of economic efficiency and biological conservation.

8.1.2 Alternatives Including the Proposed Action

To address the problems and objectives stated above, NMFS is proposing to take the following actions in this HMS FMP and Addendum. These preferred alternatives are presented in generally the same order in which they are presented in the text. Section numbers where the alternative can be found in the document follow each preferred alternative in parentheses. The full range of alternatives considered in the HMS FMP, and analyses of the impacts of all alternatives, can be found in the corresponding sections in the document. As above, the sections with an "*" are sections which are updated in the Addendum and BFT specifications, and readers should reference those documents for the latest information on BFT.

- Adopt quotas and time periods to support rebuilding of western Atlantic bluefin tuna*, North Atlantic swordfish, and large coastal sharks stocks (2.3 - 2.5);
- Limit access to the shark and swordfish fisheries; require shark or swordfish limited access permit to gain access to the bigeye, albacore, yellowfin, and skipjack (BAYS) tunas fisheries (4.5 - 4.7);
- Implement observer coverage on charter/headboat vessels, and in the bluefin tuna purse seine and harpoon fisheries (3.5);
- Prohibit the use of drift gillnets in Atlantic tunas fisheries (2.3.7);
- Establish a "School Reserve" category in the bluefin tuna fishery* (3.2.1);
- Change the fishing year for Atlantic tunas to June 1 through May 31 (3.6);
- Close the Florida Straits to pelagic longline fishing gear between July and September, including a requirement for use of a vessel monitoring system (VMS) and gear marking for all HMS commercial net and longline fisheries (2.4.3);
- Close an area off the Mid-Atlantic and New England coast to pelagic longline fishing gear during the month of June in order to reduce dead discards of BFT* (2.3.2.6 - only in Addendum);
- Change the quota monitoring procedures for the Atlantic swordfish fishery including counting dead discards against the quota and accounting for recreational fishing mortality;
- Require attendance at a vessel operator education workshop for all pelagic longline vessel

operators (2.4.4);

- Require vessel operators to complete logbook forms within 24 hours of completing fishing activities for a day (3.5);
- Implement recommendations of the Atlantic Offshore Cetacean Take Reduction Plan relevant to pelagic longline vessels (2.4.4);
- Implement the recommendations of the Large Whale Take Reduction Plan (2.5.2.3);
- Develop and implement a bycatch and bycatch mortality reduction outreach program for recreational HMS fishery participants (3.5);
- Allow retention of only those shark species known or expected to be able to withstand specified levels of fishing mortality (2.5.1.1);
- Change the system of opening and closing shark fisheries and making seasonal quota adjustments (2.5.1.2);
- Establish catch and release fishing only for recreational shark fisheries for large coastal and small coastal sharks with a limit of one pelagic shark/vessel/trip (2.5.1.3);
- Require that all sharks landed by recreational anglers have heads, tails, and fins attached (2.5.1.3);
- Extend the anti-finning prohibition for sharks to all sharks (2.5.2.4);
- Dissolve the Shark Operations Team (2.5.2.6);
- Change the quotas for pelagic and small coastal sharks and establish a separate quota for porbeagle sharks and for dead discards of blue sharks (3.4);
- Require all charter/headboat vessels to obtain an annual vessel permit and to submit logbooks for all HMS trips (3.5);
- Require registration for all HMS tournaments (3.5); and
- Establish new procedures for issuing experimental fishing permits (2.5.2.5).

8.1.3 Affected Environment (No change from draft FMP)

(STET)

8.1.4 Environmental Consequences of Fisheries Actions: Effects of the Fishery on the Environment (No change from draft FMP)

(STET)

8.2 Regulatory Impact Review

Executive Order 12866, signed in October 1993, requires agencies to take a deliberative, analytical approach to rulemaking, including assessment of the costs and benefits of proposed

actions. The Department of Commerce (DOC) and the National Oceanic and Atmospheric Administration (NCAA) require preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new fishery management plan, significantly amend an existing plan, or may be significant in that they reflect important DOC/NCAA policy concerns and are of public interest. The RIR provides a comprehensive review of the changes in net economic benefits to society expected from the implementation of the proposed measures. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve problems. The purpose of the analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way.

The table of contents for the RIR is provided to aid reviewers in referencing corresponding sections of the FMP. Chapter 7 provides the bulk of the Draft RIR. There was a separate RIR prepared for the Addendum and General Category Effort Control Specifications, and readers should reference that document for the latest information on impacts of proposed measures related to BFT, especially those with an "*".

8.3 Social Impact Assessment/Fishery Impact Statement

Table of Contents **Section**

8.3.1 Introduction (No change from draft FMP)

(STET)

8.3.2 Problems and Methods (No change from draft FMP)

(STET)

8.3.3 Summary of Impact Assessment

A summary of the social impacts for each alternative considered in the Atlantic HMS FMP is presented in Table 8.2. A more complete discussion is provided under each alternative in Chapters 2 and 3. For the alternatives regarding BFT, the most up-to-date information and alternatives are contained in the Addendum to the draft FMP.

Table 8.2 Summary of social and cultural impacts of alternatives

Action	Social Impacts
Atlantic Tunas Rebuilding: Authorized Gears	

Action	Social Impacts
Status Quo	No social impact expected.
Allow spearguns as an authorized gear type	Social and community impacts are expected to be mixed, though generally positive. Speargun fishermen would benefit, however, there would likely be larger social costs given the intense competition that exists in the bluefin tuna fishery.
Prohibit the use of drift gillnets (DGN) in the Atlantic tunas fisheries. **[PREFERRED ALTERNATIVE]**	There are potential social costs of this alternative for the community of drift gillnet fishermen, though they are largely in foregone opportunity that has not been fully exploited to date. These social costs are offset by benefits to fishing communities of preventing expansion of a fishery directed on fully fished stocks and with potentially high bycatch rates.
Bluefin Tuna Rebuilding: Quota Alternatives	
Status quo	No expected change.
10 Year Rebuilding Program	There are social costs associated with this alternative for fishery participants and for bluefin tuna fishing communities, as this alternative calls for a quota reduction. This alternative would likely result in some displacement from the commercial fishery and associated businesses. Other fisheries in the region are generally fully capitalized and displaced bluefin tuna fishermen could have to find employment in other sectors. The recreational bluefin tuna sector and communities where this fishery is particularly active would also experience negative impacts from this alternative, and recreational participation could decrease or shift to other fisheries.
ICCAT Rebuilding Program (20 Years) **[PREFERRED ALTERNATIVE]**	This alternative calls for a small increase in the United States' landing quota of BFT, and therefore is not likely to have any negative social or cultural impacts.
Bluefin Tuna Rebuilding: Domestic Allocation Alternatives (as generally applied to all quota alternatives)	
Status quo	The social impacts of this alternative will likely be continued conflict between recreational and commercial user groups.
Status quo with Purse Seine cap of 250 mt. **[PREFERRED ALTERNATIVE]**	As with the previous alternative, the social impacts of this alternative will likely be continued conflict between recreational and commercial user groups, however, this alternative is expected to have fewer destabilizing impacts on fishing communities than other domestic allocation alternatives.
Eliminate mortality in the Angling category fishery (school and large school/small medium bluefin) (i.e., catch and release fishery only)	Substantial negative impacts for the recreational bluefin tuna sector and communities where this fishery is particularly active. This would be offset, to some degree, by gains in the commercial sector, however, this alternative would not provide for the sustained participation of one sector of the bluefin tuna fishery.

Action	Social Impacts
50 percent reduction in purse seine allocation, redistributed proportionally to other categories	Substantial negative impacts for the purse seine category fishermen. This fishery is prosecuted by five vessels operating out of New Bedford, and Gloucester, MA and negative impacts would be felt most intensely in those communities. These negative impacts would be offset, to some degree, by gains in other categories, however, this alternative would substantially impede sustained participation in the bluefin tuna fishery by purse seiners.
Bluefin Tuna Rebuilding: Alternatives to Reduce Dead Discards	
Status Quo	No impact expected.
Time/area closure in NW Atlantic during June **[PREFERRED ALTERNATIVE]**	Travel time, as well as costs for fuel, bait, and ice may also increase. Communities with seafood processors near the closed area may also be affected, but given short time span of closure, it is not expected to be significant.
Change target catch requirements	Could benefit or cause negative impact to fishermen and fishing communities by allowing more BFT to be retained, or by requiring more target species to be landed.
Canadian model	This alternative could make it difficult to plan for the fishing season, and would not allow fishermen to displace effort as easily as other alternatives. In addition, this alternative would impose great costs on fishermen as the observer coverage is paid for by industry.
Closure of all longline fisheries once any HMS quota is met	Would have a significant impact on fishermen and fishing communities, as the quotas on some fisheries which use longline gear close after only a few weeks. As this alternative would close all HMS fisheries after one has met it's quota, the social and cultural impact would be significant.
Bluefin Tuna Rebuilding: Quota Transfer Criteria	
Status quo	No social impacts expected.
Add "Effects on Rebuilding and Overfishing" as a criteria **[PREFERRED ALTERNATIVE]**	Positive impacts for bluefin tuna fishery participants and fishing communities of speeding rebuilding. Social costs of this alternative could be borne by Angling category participants, though these costs are not expected to be substantial or prolonged.
Limit quota transfers to 20% of original quota	Positive impacts for bluefin tuna fishery participants and fishing communities of speeding rebuilding. Social costs of this alternative could be borne by fishery participants in the short-term, though these costs are not expected to be substantial or prolonged.
Bluefin Tuna Rebuilding: Size Limits	
Status quo **[PREFERRED ALTERNATIVE]**	No social impacts expected.

Action	Social Impacts
Increase recreational minimum size for bluefin to 47 inches (119 cm)	This alternative would have substantial negative impacts on several recreational bluefin tuna fishing communities, including Ocean City, MD; Wachapreague, VA; and Cape May, NJ. Impacts of this alternative would be felt throughout the recreational and charterboat sectors of the bluefin tuna fishery.
Increase minimum size for sale for bluefin to 81 inches (206 cm)	Minimal social impacts are expected, though this alternative could lead to a greater share of the landings being landed by fewer vessels, thus redistributing some benefits of the fishery.
Reduce minimum size for sale for bluefin tuna to 47 inches (119 cm)	Minimal social impacts are expected, though this alternative could have some benefits for bluefin tuna fishing communities in the mid-Atlantic area, with associated adverse impacts on communities in New England.
Bluefin Tuna Rebuilding: Bag Limits	
Status quo **[PREFERRED ALTERNATIVE]**	No social impacts expected.
Adopt sliding scale daily catch limit for Coast Guard inspected vessels	The charter/headboat sector of the bluefin tuna fishery, and its customers and communities, would enjoy benefits from this alternative.
Bluefin Tuna: Effort Controls	
Prohibit the use of spotter aircraft in all BFT fisheries, except the Purse Seine category	Negative impacts on spotter aircraft pilots, as some may be displaced from the BFT fishery. Positive impacts to General and Harpoon category vessel permit holders as season may last longer and participation could broaden in these fisheries. Reduction in social conflict between vessel operators that use planes and those that do not.
Prohibit the use of spotter aircraft in all BFT fisheries, except the Purse Seine and Harpoon Categories	Less negative impact on spotter aircraft pilots compared to above alternative, as they could still assist vessels in the Harpoon category. Less positive impacts on vessel permit holders in General and Harpoon categories as compared to above alternative.
Reintegrate Harpoon and General categories	Potential negative impacts on Harpoon category permit holders that rely on multiple catch limit in Harpoon category
Status quo (no action) **[PREFERRED ALTERNATIVE]**	Continued social conflict between those vessel operators who use spotter aircraft and those who do not. May essentially prevent those harpoon vessels (in both the Harpoon and General categories) who do not use spotter aircraft from participating and competing in the BFT fishery. Reduces effectiveness of other effort controls and can result in a shorter fishing season, with negative social impacts on communities. Continued benefits will accrue to spotter aircraft pilots and, to a lesser extent, to the vessels that use them.
Establish a "School Reserve" category **[PREFERRED ALTERNATIVE]**	No social impacts are expected
Bigeye Tuna Rebuilding: Quota Alternatives	

Action	Social Impacts
Status quo	Social impacts of this alternative could be negative if the stock continues to decline.
10 year rebuilding program **[PREFERRED ALTERNATIVE]**	Social impacts of this alternative could be negative in the short-term, requiring a 21 percent reduction in commercial landings.
Adopt ICCAT rebuilding program that would ensure rebuilding to level capable of producing MSY within the shortest period possible.	This alternative cannot be assessed because no ICCAT rebuilding program is in place.
Bigeye Tuna Rebuilding: Size Limits	
Status quo **[PREFERRED ALTERNATIVE]**	No social impacts are expected.
Increase minimum size (commercial and recreational) to 47 inches (119 cm)	This alternative could have negative social impacts on commercial and recreational fishing communities, particularly those with longline and charter boat fleets.
Yellowfin Tuna: Size Limits	
Status quo **[PREFERRED ALTERNATIVE]**	No social impacts are expected.
Increase minimum size (both commercial and recreational) for yellowfin to 47 inches (119 cm)	This alternative could have negative social impacts on commercial and recreational fishing communities, particularly those with longline and charter boat fleets.
Yellowfin Tuna: Recreational Bag Limits	
Status quo (no recreational bag limit for yellowfin tuna)	No social impacts are expected.
Establish a recreational bag limit of 3 yellowfin tuna/person/day **[PREFERRED ALTERNATIVE]**	Minimal social impacts expected, as most recreational trips land less than less than 3 yellowfin per person. May have some negative impacts in areas where charter vessels retain more than this limit.
North Atlantic Swordfish Rebuilding: Accounting for Fishing Mortality	
Not counting dead discards against the quota (status quo)	Long-term social impacts could be substantial should the stock continue to decline.
Count dead discards against quota **[PREFERRED ALTERNATIVE]**	There could be negative social impacts of this alternative, distributed throughout the communities that target swordfish on the Atlantic and Gulf coasts and in the Caribbean. Social costs of this alternative may be necessary, however, to achieve the long-term conservation requirements and goals of the fishery as mandated by the Magnuson-Stevens Act.

Action	Social Impacts
Recreational landings exempt from U.S. quota (status quo)	No impacts expected in the short -term. If recreational landings increase and are not accounted for under this alternative, impacts could result form the subsequent decline in the stock.
Establish a recreational allocation for swordfish from TAC	This alternative could have short-term negative impacts, particularly for commercial swordfish vessels, with long-term positive impacts for stability of the commercial and recreational fisheries.
Subtract recreational swordfish mortalities from the swordfish Incidental Landings Quota on an annual basis **[PREFERRED ALTERNATIVE]**	This alternative could have short-term negative impacts, particularly for commercial swordfish vessels, with long-term positive impacts for stability of the commercial and recreational fisheries.
North Atlantic Swordfish Rebuilding: Quota Alternatives	
Establish TAC to rebuild stock to MSY in 3 years	Substantial negative social impacts, including displacement of fishery participants and destabilizing effects on fishing communities. While this alternative would lead to the fastest rebuilding of the stock, it does not minimize, to the extent practicable, the adverse economic impacts on fishing communities.
Establish TAC to rebuild stock to MSY in 6 years	Negative social impacts, including displacement of fishery participants and destabilizing effects on fishing communities. While this alternative would lead to the fastest rebuilding of the stock, the preferred alternative allows NMFS to minimize, to the extent practicable, adverse impacts on fishing communities without compromising conservation goals of this FMP.
Establish TAC to rebuild stock to MSY in 10 years **[PREFERRED ALTERNATIVE]**	Some negative social impacts for fishing communities and participants in the short-term, though these costs are offset by achievement of long-term stability for the fishery and realization of conservation goals of this FMP.
Adopt ICCAT rebuilding program that would ensure rebuilding to level capable of producing MSY within the shortest period possible.	This alternative cannot be assessed because no ICCAT rebuilding program is in place.
North Atlantic Swordfish Rebuilding: Catch of Small Swordfish	
33 lb dw minimum size limit for recr. and comm. fishermen **[PREFERRED ALTERNATIVE]**	Minimal social impacts due to requirement to discard undersized swordfish.
Prohibit pelagic longline fishing in the Florida Straits from July-September **[PREFERRED ALTERNATIVE]**	Substantial social impacts, particularly for pelagic longline vessels that fish in the Florida Straits. A complete discussion of the social impacts of this alternative is presented in chapter 7.

Action	Social Impacts
Require the use of VMS on all pelagic longline vessels. **[PREFERRED ALTERNATIVE]**	Substantial one-time cost for pelagic longline vessel owners, though this cost may be offset by several social benefits including increased effectiveness in enforcing rebuilding-related regulations; increased human safety at sea; and increased communication with other vessels and shore.
North Atlantic Swordfish Rebuilding: Gear Modifications	
No gear modifications (status quo)	Long-term negative social impacts if bycatch reduction is not accomplished consistent with NS 9, the MMPA, and the ESA.
Gear-marking requirements for HMS net and longline vessels **[PREFERRED ALTERNATIVE]**	Minimal social costs, with benefits to the fleet and fishing communities of increasing the enforceability of rebuilding management measures.
Prohibit the possession and use of any hook but a circle hook in HMS recreational fisheries.	This alternative has social benefits for recreational anglers, including promotion of conservation-oriented practices in the fishery. AP members report to NMFS that such measures may be more effectively adopted through education and outreach programs, rather than through regulation.
Prohibit the possession and use of any hook but a circle hook in HMS commercial fisheries.	This alternative has social costs for commercial fishing vessels due to possible changes in catch composition, reduced revenues, and cost of the hooks. More research is needed on the bycatch mortality reduction rates of circle hooks before this alternative can be preferred.
Require possession of a de-hooking device on all HMS vessels	Social impacts of this alternative are minimal.
Prohibit the use of pelagic longline gear in HMS fisheries.	Substantial social costs. Direct social costs would be borne by pelagic longline fishery participants, associated businesses, and their communities. Indirect costs would be borne by society in the form of likely losing a substantial part of the domestic swordfish market to foreign competitors. The social costs of this alternative include the inability to provide sustained participation of swordfish fishing communities in HMS fisheries.
North Atlantic Swordfish Rebuilding: Bycatch of Protected Species and the AOCTRP	
Move after one entanglement with a protected species **[PREFERRED ALTERNATIVE]**	Social impacts of this alternative are minimal, though the cost of doing business may increase for directed swordfish vessels.
Limit the length of mainline of a pelagic longline to 24 nautical miles from Aug 1-Nov. 30 in the Mid-Atlantic Bight **[PREFERRED ALTERNATIVE, INTERIM MEASURE]**	The social impacts of this alternative are minimal.

Action	Social Impacts
Haul pelagic longline gear in the order it was set in the Mid-Atlantic Bight Aug. 1-Nov. 31	The social impacts of this gear include increased crew training time and expense, crew fatigue, and other safety considerations. As reported by researchers from Rutgers University, pelagic longline fishing vessels have an increasingly difficult time finding and retaining crew (section 5.12); this alternative would exacerbate that problem for the fleet.
Close critical right whale habitat to pelagic longline and driftnet fisheries **[PREFERRED ALTERNATIVE]**	The social impacts of this alternative are minimal because there is no known HMS longline or driftnet fishing activity in this area.
Limit access to pelagic longline gear	This alternative allows sustained participation to HMS fisheries by those vessels with established fishing histories. This alternative has positive social impacts for those vessels and, in stabilizing the fishery, for society. This alternative has some social costs for vessels excluded from the fishery, although these costs do not outweigh conservation objectives of the FMP. An alternative similar to this is preferred in Chapter 4.
Vessel education workshops for pelagic longline vessels **[PREFERRED ALTERNATIVE]**	Minimal social costs involved with attending workshops that are outweighed by benefits to the fleet, fishing communities, and society of having the universe of fishery participants educated consistently about bycatch avoidance and reduction.
Large Coastal Shark Rebuilding: Prohibited Species	
Status quo	No additional social impacts are expected.
Prohibit possession of dusky sharks within federal waters	Adverse social impacts are expected for fisheries that preferentially retain dusky sharks. This species is overfished, however, this alternative (or a variation of it – see Alt 8) may be necessary to meet the conservation objectives of this FMP and of the Magnuson-Stevens Act. In the long-term, these achieving these conservation objectives will have positive social and community impacts.
Prohibit possession of night sharks within federal waters	Minimal adverse social impacts because night sharks are not an important component of landings. Positive social impacts in the long-term.
Prohibit retention of all sharks	Immediate and severe social impacts, including the elimination of the directed LCS bottom longline and SCS drift gillnet fisheries. While this alternative would address conservation objectives, these objectives could likely be achieved by taking action that would have less severe social impacts.
Prohibit retention of all LCS; allow retention of commonly caught pelagics and SCS in Federal waters	Substantial adverse impact for directed LCS fisheries. Immediate and severe social impacts, including the elimination of the directed LCS bottom longline and SCS drift gillnet fisheries. While this alternative would address conservation objectives, these objectives could likely be achieved by taking action that would have less severe social impacts.
Prohibit commercial fishing for, and possession of, all Atlantic sharks in Federal waters	Immediate and severe social impacts in all shark fisheries. Community impacts would be felt in both recreational and commercial fishing communities, in both commercial and recreational fisheries. Communities in Florida and North Carolina would be particularly affected.
Prohibit recreational fishing for, and possession of, all Atlantic	Substantial social impacts by eliminating recreational landings of all sharks, particularly for the for-hire sector.

Action	Social Impacts
sharks in Federal waters	
Prohibit the retention of uncommon and seriously depleted LCS, pelagic, and SCS, including dusky and nights sharks and the 5 already prohibited **[PREFERRED ALTERNATIVE]**	This alternative mitigates the most severe cuts necessitated by conservation objectives by allowing fishery participants continued access to that part of the resource that can sustain fishing pressure. This alternative is expected to have positive long-term social and community-level impacts by contributing to rebuilding.
Large Coastal Shark Rebuilding: Commercial Quota Alternatives	
Status quo	Social impacts of this alternative are substantial and largely negative, including worsening derby conditions and increased instability in the directed shark fishery. Positive social impacts include maintenance of income for directed shark fishermen, however, this alternative is not sustainable and carries more severe social costs over time. This alternative does not meet requirements of NS 8 to ensure continued participation by fishing communities, to the extent practicable.
Maintain LCS management unit and reduce LCS quota by 50%	This alternative would result in an increasingly unstable fishery, with associated social and community impacts. In the long-term, the LCS fishery would cease to be commercially viable. Social benefits, in the form of temporary maintenance of income, are not sustainable.
Maintain LCS management unit; close the directed commercial fishery	This alternative has severe adverse social and community impacts. Although such a measure might be necessary to achieve conservation objectives in the shortest time possible, other alternatives will allow sustained participation of fishing communities (at reduced levels) while still rebuilding LCS stocks.
Separate the LCS management unit into ridgeback (RB) and non-ridgeback (NRB);[1] each subgroup given separate and reduced quotas	This alternative could have negative impacts on directed shark fishing communities. Some fishing operations are operating on the margins already (chapter 5.12), and this alternative could cause them to cease operations.
Separate LCS management unit into RB and NRB; separate quotas for each subgroup; establish minimum size & maintain quota for RB; reduce quota for NRB **[PREFERRED ALTERNATIVE]**	Social and community level impacts of this alternative are expected to be substantial. Impacts could include reductions in revenue and employment, changes in fishing practices, and changes in the nature of the fishery. These adverse social impacts may be necessary to achieve conservation objectives of this FMP and the Magnuson-Stevens Act, and are mitigated to the extent practicable in order to allow continued participation of fishing communities.
Separate LCS into RB and NRB; establish minimum size and maintain quota on RB; establish separate, phased-in quota reduction on NRB	Substantial social impacts due to potential changes in fishery operation and due to NRB LCS quota reduction. The severity of the NRB LCS quota reduction would be mitigated by the phase-in.
Separate LCS into RB and NRB; establish minimum size and separate quota on RB; reduce NRB quota to zero	Substantial social impacts due to potential changes in fishery operation and due to NRB LCS quota reduction. This alternative may have social impacts more severe than required to achieve conservation objectives.
Large Coastal Shark Rebuilding: Commercial Trip Limits	
Status quo (4,000 lbs dw) **[PREFERRED ALTERNATIVE]**	Will have the benefit of prolonging the season and lending some stability to the fishery.

Action	Social Impacts
Increase LCS commercial trip limit to 6,000 lbs dw	Will increase the derby nature of the fishery and shorten the season, both socially destabilizing effects.
Eliminate the LCS trip limit	Will increase the derby nature of the fishery and shorten the season, both socially destabilizing effects.
Large Coastal Shark Rebuilding: Commercial Fishery Operation	
Status quo (5-day advance notice for closures)	This alternative will continue to contribute to the instability and unpredictability of the LCS fishery.
Extend advance notice period to 10 days	This alternative would increase the predictability of the LCS fishery by allowing more advanced planning of trips.
Schedule openings for specified periods; adjust quota in same time period following year unless sufficient underage to allow reopening within year	This alternative may increase the predictability of the LCS fishery by allowing more advanced planning of trips. However, there are social costs of multiple openings and closings under this alternative.
Schedule openings for specified periods; adjust quota in same time period following year **[PREFERRED ALTERNATIVE]**	This alternative increases predictability for shark vessel operators and dealers.
Large Coastal Shark Rebuilding: Recreational Bag Limits	
Status quo (2 sharks/vessel/trip plus allowance for 2 Atlantic sharpnose/person/trip	Minimal social impacts in the short term, with adverse impacts in the long-term as stocks continue to decline.
Reduce bag limit to 1 shark/vessel/trip	Minimal social impacts because most anglers are already operating under these restrictions.
Establish allowance of 1 Atlantic sharpnose/person/trip	Substantial social impacts by eliminating landings of all sharks except Atlantic sharpnose.
Minimum size of 4.5 feet (137 cm) for all sharks	Substantial social impacts by establishing essentially a catch-and-release fishery in nearshore waters. These impacts may be mitigated by the fact that there is a conservation ethic among recreational fishermen in support of catch-and-release fishing.
Catch-and-release fishing only	Substantial social impacts by eliminating recreational landings of all recreationally caught sharks.
Catch-and-release fishing only for LCS and SCS; bag limit of 1 pelagic shark/vessel/trip **[PREFERRED ALTERNATIVE]**	The preferred alternative mitigates some of the adverse social impacts of other alternatives with an allowance for landing one pelagic shark per vessel per trip while also supporting conservation objectives of this FMP and the Magnuson-Stevens Act. A conservation ethic among recreational fishermen in support of catch-and-release fishing may also mitigate adverse impacts of this alternative.
Atlantic Sharks: Recreational Landing Condition	
Status quo (no requirements)	*This alternative could eventually result in implementation of more restrictive management measures than would otherwise be required due to problems with identification.*
Require all sharks landed by recreational anglers have heads, tails, and fins attached	This alternative would have minimal social impacts because it would not preclude anglers from bleeding sharks, and would support conservation objectives.

Action	Social Impacts
[PREFERRED ALTERNATIVE]	
Atlantic Sharks: Overage and Underage Adjustments	
Status quo	This alternative would perpetuate beliefs that the northern fishermen and communities are unfairly penalized for commercial quota overages in souther areas.
Season-specific quotas and adjustments for commercial fisheries; annual bag limits and adjustments for recreational fisheries **[PREFERRED ALTERNATIVE]**	This alternative should reduce or eliminate the sense of unfairness between regions in the allocation of available quota.
Account for all sources of mortality in establishing quota, including counting dead discards and landings in state waters after Federal closure against quota **[PREFERRED ALTERNATIVE]**	Substantial social impacts where dead discards or state landings after a Federal closure comprise a large portion of the currently available quota. This will have the effect of increasing competition in the fishery, although it would also hasten rebuilding. Adverse social impacts of this alternative may be necessary to achieve conservation objectives of the fishery and of the Magnuson-Stevens Act. Social concerns under this alternative could be mitigated by implementation of limited access.
Establish regional and/or state quotas	This alternative would likely decrease the predictability and stability of the shark fisheries.
Atlantic Sharks: Time/Area Closures	
Status quo (no time/area closures **[PREFERRED ALTERNATIVE]**	No short-term social impacts expected.
Close juvenile and subadult EFH year-round to directed shark fishing and retention of all shark bycatch	Substantial social impacts expected, particularly on nearshore fishermen. In the long-term, this alternative would likely result in faster rebuilding of LCS, and thereby in a quicker return to a rational and stable fishery. Conservation objectives for this alternative can be accomplished other measures proposed in this FMP.
Close juvenile and subadult EFH during pupping season to directed shark fishing and retention of all shark bycatch	This alternative would likely have fewer impacts on nearshore fishermen because the closure would only affect spring fishing operations. In the long-term, this alternative would likely result in faster rebuilding of LCS, and thereby in a quicker return to a rational and stable fishery. Conservation objectives for this alternative can be accomplished other measures proposed in this FMP.
Close sandbar and dusky shark juvenile and subadult wintering EFH off Cape Hatteras, NC to directed shark fishing and retention of all shark bycatch	This alternative would cause substantial social impacts because the winter fishery is important to North Carolina fishermen. Conservation objectives for this alternative can be accomplished through separate action by the state as well as by other measures proposed in this FMP.
Atlantic Sharks: Authorized Gears	
Status quo	This alternative would not be expected to have additional social impacts because fishermen are already operating under these conditions.
Adopt Large Whale TRP recommendations **[PREFERRED ALTERNATIVE]**	This alternative would not be expected to have additional social impacts because fishermen are already operating under these conditions.

Action	Social Impacts
Require 100 percent observer coverage in shark drift gillnet fishery at all times; prohibit use of the gear unless a NMFS-approved observer is aboard	Social impacts of this alternative are expected to be minimal when observers can be obtained by NMFS. Social impacts will be adverse and substantial when observers cannot be obtained, but those impacts will be mitigated when observer services are procured.
Atlantic Sharks: Anti-Finning	
Status quo	This alternative would not be expected to have additional social impacts because fishermen are already operating under these conditions.
Extend finning prohibition to all sharks as a condition of Federal permit **[PREFERRED ALTERNATIVE]**	Minimal impact expected.
Atlantic Sharks: Public Display	
Status quo	This alternative results in extended delays to aquaria and collectors.
Establish display quota (0.5 mt ww) and display permitting and reporting system **[PREFERRED ALTERNATIVE]**	This alternative would eliminate delays of the current system, with few other social impacts.
Atlantic Sharks: Operations Team	
Status quo	No social impacts expected.
Dissolve OT as superseded by HMS AP **[PREFERRED ALTERNATIVE]**	No social impacts expected.
Pelagic Sharks: Commercial Quotas	
Status quo	No short-term social impacts expected. Negative impacts may result if stocks decline.
Interim reduced quota pending assessment	May have variable social impacts depending on the magnitude of reductions. May have short-term impacts if reductions are large; may mitigate any future reductions that may be necessary if stocks are declining.
Establish separate porbeagle quota of 30 mt dw and reduce pelagic quota by 30 mt dw	May have negative social impacts to the extent that fishermen would not be able to expand their porbeagle operations.
Prohibit possession of blue sharks; establish blue shark dead discard quota of 273 mt dw; reduce pelagic quota by overages in blue shark dead discards	May have substantial social impacts because blue shark dead discards may exceed the dead discard quota and reduce the pelagic shark quota. Depending on the magnitude of any reductions, derby fishing conditions may develop.
Pelagic Sharks: Recreational Bag Limits	
See Alternatives under LCS recreational bag limits	
Small Coastal Sharks: Commercial Quotas	
Status quo	No short-term social impacts expected. Negative impacts may result if stocks decline.
Interim reduced quota pending assessment	May have variable social impacts depending on the magnitude of reductions. May have short-term impacts if reductions are large; may

Action	Social Impacts
	mitigate any future reductions that may be necessary if stocks are declining.
Cap commercial quota at 10 percent higher than 1997 levels as an interim measure pending assessment	May have negative social impacts to the extent that fishermen would not be able to expand their SCS operations above 1997 levels.
Small Coastal Sharks: Recreational Bag Limits	
See Alternatives under LCS recreational bag limits	

8.3.4 Addressing National Standard 8

National Standard 8 of the Magnuson-Stevens Act requires that conservation and management measures account for the needs of fishing communities. NS 8 requires that conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to: (1) provide for the sustained participation of such communities; and (2) to the extent practicable, minimize adverse impacts on such communities. Conservation and management alternatives were evaluated in view of these criteria. NMFS' approach to NS 8 is briefly discussed below. Applicability of NS 8 to specific alternatives is addressed in the analysis of the alternative.

The requirement to rebuild overfished stocks is likely to lead to a reduction in fishing mortality and associated loss of revenues and community stability for fishing communities. In the case of Atlantic HMS, several overfished stocks are in a severely depleted condition, and rebuilding may require substantial reductions in fishing effort. In many cases, communities that participate in Atlantic HMS fisheries are strongly identified with the fisheries and have extensive social and cultural dependence on the resources. Many of these communities have long-standing histories as HMS fishing communities.

NMFS selected preferred rebuilding alternatives that most effectively met requirements of both NS 1 and NS 8. For western Atlantic BFT, the preferred rebuilding alternative is the ICCAT Rebuilding Program adopted by ICCAT in November, 1998, which implements a small increase in the landing quota for the United States. The impacts on communities resulting from the rebuilding program for BFT should be minimal, if any. For North Atlantic swordfish, the longest rebuilding program allowed under the Magnuson-Stevens Act was chosen in order to provide swordfish-dependent fishing communities sustained access to the resource and to minimize adverse impacts on them during the rebuilding period. The preferred alternative allows NMFS to achieve conservation objectives while minimizing, to the extent practicable, adverse impacts on fishing communities. For large coastal sharks (LCS), rebuilding requires substantial reductions in fishing mortality. The combined rebuilding alternatives are designed to allow the highest possible level of access to the resource for participants with an active history in the fishery, while also implementing necessary conservation measures for those species and size classes that cannot sustain significant fishing pressure. To the extent practicable, NMFS has selected alternatives to minimize adverse impacts on fishing communities. However, it is likely that implementation of

the LCS rebuilding program will cause some participants to leave the fishery and may have adverse impacts on some fishing communities, particularly in Florida and North Carolina. These alternatives are preferred, nevertheless, because they are the least restrictive measures that are consistent with the conservation requirements of the Magnuson-Stevens Act.

8.4 Paperwork Reduction Act (No change from draft FMP)

(STET)

8.5 Coastal Zone Management (No change from draft FMP)

(STET)

8.6 Endangered Species Act (No change from draft FMP)

(STET)

8.7 Marine Mammal Protection Act (No change from draft FMP)

(STET)

8.8 Federalism (No change from draft FMP)

(STET)

8.9 Executive Order 12866 (E.O. 12866) (No change from draft FMP)

(STET)

8.10 List of Preparers (No change from draft FMP)

(STET)

8.11 List of Agencies and Organizations Consulted (No change from draft FMP)

(STET)

References for Chapter 8

(STET)